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EXAMINER

AUGHENBAUGH, WALTER

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,601

Applicant(s)

KRECH ET AL.

Examiner

Walter B Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 18-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 24-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Acknowledgement of Applicant's Amendments

1. The amendments made in claims 1-5, 7 and 8 given on pages 1-2 and 16-17 of Paper 8 have been received and considered by Examiner.
2. New claims 24-45 presented on pages 2-5 of Paper 5 have been received and considered by Examiner.

WITHDRAWN REJECTIONS

3. The 35 U.S.C. 112, first paragraph rejection of claim 1 made of record in paragraph 8 of Paper 3 has been withdrawn due to Applicant's arguments on pages 8-9 of Paper 8.
4. The 35 U.S.C. 112, second paragraph rejection of claims 1-5, 7 and 8 made of record in paragraph 10 of Paper 3 has been withdrawn due to Applicant's amendments in Paper 8 (where appropriate) or due to Applicant's arguments (where appropriate) on pages 9-11 of Paper 8.
5. The 35 U.S.C. 103 rejection of claims 1, 2 and 5-11 made of record in paragraph 12 of Paper 3 has been withdrawn due to Applicant's amendments in Paper 8.
6. The 35 U.S.C. 103 rejection of claim 3 made of record in paragraph 13 of Paper 3 has been withdrawn due to Applicant's amendments in Paper 8.
7. The 35 U.S.C. 103 rejection of claim 4 made of record in paragraph 14 of Paper 3 has been withdrawn due to Applicant's amendments in Paper 8.
8. The 35 U.S.C. 103 rejection of claims 12-17 made of record in paragraph 15 of Paper 3 has been withdrawn due to Applicant's amendments in Paper 8.

Election/Restrictions

9. Applicant's election with traverse of Group I in Paper No. 8 is acknowledged. The traversal is on the ground(s) that applying the friction material to the molded article after curing via adhesive is a materially different process. This is not found persuasive because the limitation that is the subject of the reason for restriction is provided in claim 23, which is dependent on claim 21 that requires that the curing is activated after step (b) of claim 21, which is required to occur before applying the friction material to the molded article. Contrary to Applicant's arguments, the limitation that is the subject of the reason for restriction is not included in the language of claims 18-23; the limitation that is the subject of the reason for restriction is introduced in claim 23. Applicant points out that no reason has been given for the restriction of the composition claim 18; no reason has been given because claim 18 was grouped along with claims 19-23 (see Paper 3).

The requirement is still deemed proper and is therefore made FINAL.

NEW REJECTIONS***Claim Rejections - 35 USC § 112***

10. Claims 8, 24 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 8, the structure intended to be recited by the term "deck" cannot be ascertained. In regard to claim 24, coefficients of friction are reported for a particular material relative to the particular second material that the material is rubbed against. What is this material

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in the case of claim 24? Claim 39 recites the limitation "said structural foam" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 30-32 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagano et al.

Nagano et al. teach a plastic pallet comprising polyolefin resin, epoxy resin and a fire proofing agent (page 3, paragraph 0007 of Public Report of Disclosure of Patent). Epoxy resin is a thermosetting resin. A pallet is a container for shipping and storage. Nagano et al. teach that the pallet comprises antimony trioxide as a fire proofing agent (equivalently a flame retardant) (page 3, paragraphs 0007 and 0008 of Public Report of Disclosure of Patent). Antimony trioxide is non-halogenated, and is therefore a non-halogenated flame retardant.

In regard to claim 37, the antimony trioxide fire proofing agent is present in an amount of 17 parts per weight (ppw) of the total composition (page 5, paragraphs 0023). This amount falls within the claimed range of "more than zero and up to and including 25 parts by weight of the total polymeric composition".

Claim Rejections - 35 USC § 103

13. Claims 1, 2 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Dresen et al.

In regard to claims 1, 9 and 10, Nagano et al. teach a plastic pallet comprising polyolefin resin, epoxy resin and a fire proofing agent (page 3, paragraph 0007 of Public Report of Disclosure of Patent). Epoxy resin is a thermosetting resin. A pallet is a container for shipping and storage. Nagano et al. fail to teach that the container comprises a friction material on at least one surface thereof, where the friction material is rubber-free. Dresen et al., however, disclose a pallet (item 10, Fig. 1-3) having a non-skid upper and/or lower surface (col. 5, lines 24-31). Dresen et al. disclose that a variety of ethylene ethyl acetates and ethylene vinyl acetates (which are rubber-free materials) are suitable resins for the non-skid surface (col. 5, lines 31-49). Therefore, one of ordinary skill in the art would have recognized to have applied the rubber-free non-skid materials of Dresen et al. to the upper and/or lower surface/s of the pallet of Nagano et al. in order to provide a non-slip surface or non-slip surfaces to the pallet of Nagano et al. since it is notoriously well known to provide pallets with a rubber-free non-skid surface or rubber-free non-skid surfaces as taught by Dresen et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the rubber-free non-skid materials of Dresen et al. to the upper and/or lower surface/s of the pallet of Nagano et al. in order to provide a non-slip surface or non-slip surfaces to the pallet of Nagano et al. since it is notoriously well known to provide pallets with a rubber-free non-skid surface or rubber-free non-skid surfaces as taught by Dresen et al.

In regard to claim 2, Nagano et al. teach that the pallet comprises a fire proofing agent (equivalently a flame retardant) such as antimony trioxide (page 3, paragraphs 0007 and 0008 of Public Report of Disclosure of Patent). In regard to claim 5, Nagano et al. teach that the polyolefin (a polypropylene) is present in an amount of 80 parts per weight (ppw) of the total

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composition and that the epoxy is present in an amount of 3 parts per weight (ppw) of the total composition (page 5, paragraphs 0023). The polypropylene is a fully prepolymerized uncrosslinked hydrocarbon polyolefin resin. In regard to claims 6 and 11, the uncrosslinked prepolymerized polyolefin is polypropylene, which is a homopolymer (as claimed in claim 6) and an alpha-olefin (as claimed in claim 11). In regard to claim 7, the antimony trioxide fire proofing agent is present in an amount of 17 parts per weight (ppw) of the total composition (page 5, paragraphs 0023). This amount falls within the claimed range of "more than 0 and up to and including 70 parts by weight of the weight of the total composition". In regard to claim 8, the pallet of Nagano et al. has at least one deck (see the figure provided on page 2 of the Machine Translation of Nagano et al., the pallet constitutes a deck).

In regard to claim 24, Dresen et al. disclose that the non-skid surface coating has an effectively high coefficient of friction (col. 10, lines 1-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the material for the non-skid coating such that a coefficient of static friction between the non-skid coating and a particular surface is in the range of 0.60 to 1.20 depending on the particular desired end results, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in the absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regard to claim 25, the deck taught by Nagano et al. has openings in it (see the two sides of the pallet that are shown in the figure provided on page 2 of the Machine Translation of Nagano et al.). In regard to claim 27, the polyethylene ethyl acetate and polyethylene vinyl acetate disclosed as suitable friction material by Dresen et al. are both thermoplastic polymers.

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14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Dresen et al. and in further view of Radican.

Nagano et al. and Dresen et al. teach the container as discussed above. Nagano et al. and Dresen et al. fail to teach that the container further comprises radio frequency identification (RFID) tags. Radican, however, teaches the use of RFID tags on pallets (col. 14, line 33) to enable the rapid acquisition and updating of container location and status (col. 13, lines 19-22). Therefore, one of ordinary skill in the art would have recognized to have provided RFID tags to the pallet of Nagano et al. and Dresen et al. in order to enable the rapid acquisition and updating of container location and status as taught by Radican.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided RFID tags to the pallet of Nagano et al. and Dresen et al. in order to enable the rapid acquisition and updating of container location and status as taught by Radican.

15. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Dresen et al., and in further view of Adedeji et al.

Nagano et al. and Dresen et al. teach the storage pallet as discussed above. Nagano et al. and Dresen et al. fail to teach the storage pallet meets the requirements of UL 2335 protocol for fire tests of storage pallets. Adedeji et al., however, teach pallets that comprise at least one resin selected from a group including thermosetting resins that passes the UL 2335 protocol for pallets (page 1, lines 1-10). It would have been well within the skill of one of ordinary skill in the art to vary the relative amounts of the components of the composition of the pallet of Nagano et al. and Dresen et al., if necessary to achieve a container that meets the UL 2335 protocol requirements for storage pallets as taught by Adedeji et al.

16. Claims 12-17, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Dresen et al. and in further view of Perez et al.

Nagano et al. and Dresen et al. teach the container as discussed above.

In regard to claim 12, Nagano et al. and Dresen et al. fail to teach that the polymeric composition further comprises at least one of a photoactivatable catalyst and a thermal curing agent. Perez et al. teach a polymer network that is applied to a storage vessel (col. 3, lines 24-25) comprising a thermally cured epoxy resin, a fully prepolymerized hydrocarbon polyolefin and optionally a fully prepolymerized functionalized polyolefin resin (col. 3, lines 8-12). Perez et al. also teach that the epoxy resin is cured by a photoactivatable cationic catalyst in another embodiment (col. 3, lines 13-17 and col. 23, lines 40-42). In regard to claims 13 and 14, Perez et al. teach that the photoactivatable cationic catalyst is an onium salt photoinitiator or a cationic organometallic complex salt (col. 23, lines 43-47) and that the thermal curing agent is an aromatic or aliphatic primary, secondary or tertiary amine (col. 23, lines 48-49). In regard to claims 15-17 and 28, Perez et al. teach that the composition is a foam (in further regard to claim 28, any foam can be considered to be "structural"), is cured and is a semi-interpenetrating polymer network (col. 23, lines 54-55 and 58-59). In regard to claim 29, Perez et al. teach that one or both of bubbles and glass beads are added to the composition of Perez et al. in order to alter the physical characteristics of the material of Perez et al. (col. 10, lines 1-13 and col. 24, lines 28-35). One of ordinary skill in the art would have recognized to have used the polymeric composition of Perez et al. as a component of the pallet of Nagano et al. and Dresen et al. since the polymeric composition of Perez et al. is applied to a storage vessel as taught by Perez et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the polymeric composition of Perez et al. as a component of the pallet of Nagano et al. and Dresen et al. since the polymeric composition of Perez et al. is applied to a storage vessel as taught by Perez et al.

17. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Dresen et al. and in further view of Ueeda et al.

Nagano et al. and Dresen et al. teach the container (i.e. pallet) as discussed above. Nagano et al. and Dresen et al. fail to teach that the container comprises an antimicrobial additive. Ueeda et al., however, disclose a propylene based polymer sheet that may be blended with another resin that is formed into a container or a pallet that comprises an antimicrobial agent (col. 9, lines 23-43). Therefore, one of ordinary skill in the art would have recognized to have added an antimicrobial agent to the composition of Nagano et al. and Dresen et al. since it is notoriously well known to include antimicrobial agents in polypropylene based polymeric blends that are formed into containers or pallets as taught by Ueeda et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added an antimicrobial agent to the composition of Nagano et al. and Dresen et al. since it is notoriously well known to include antimicrobial agents in polypropylene based polymeric blends that are formed into containers or pallets as taught by Ueeda et al.

18. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Perez et al.

Nagano et al. teach the container as discussed above. Nagano et al. fail to teach that the container comprises structural foam as claimed in claim 33 or that the container comprises one or

both of bubbles and glass beads as fillers as claimed in claim 34. Perez et al., however, disclose a polymer network that is applied to a storage vessel (col. 3, lines 24-25) comprising a thermally cured epoxy resin, a fully prepolymerized hydrocarbon polyolefin and optionally a fully prepolymerized functionalized polyolefin resin (col. 3, lines 8-12). In regard to claim 33, Perez et al. disclose that the composition is a foam (any foam can be considered to be "structural") (col. 23, lines 58-59). In regard to claim 34, Perez et al. disclose that one or both of bubbles and glass beads are added to the composition of Perez et al. in order to alter the physical characteristics of the material of Perez et al. (col. 10, lines 1-13 and col. 24, lines 28-35). Therefore, one of ordinary skill in the art would have recognized to have used the polymeric composition of Perez et al. that comprises a thermally cured epoxy resin and a fully prepolymerized hydrocarbon polyolefin as a component of the pallet of Nagano et al. since the polymeric composition of Perez et al. is applied to a storage vessel as taught by Perez et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the polymeric composition of Perez et al. that comprises a thermally cured epoxy resin and a fully prepolymerized hydrocarbon polyolefin as a component of the pallet of Nagano et al. since the polymeric composition of Perez et al. is applied to a storage vessel as taught by Perez et al.

19. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Ueeda et al.

Nagano et al. teach the container (i.e. pallet) as discussed above. Nagano et al. fail to teach that the container comprises an antimicrobial additive. Ueeda et al., however, disclose a propylene based polymer sheet that may be blended with another resin that is formed into a

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container or a pallet that comprises an antimicrobial agent (col. 9, lines 23-43). Therefore, one of ordinary skill in the art would have recognized to have added an antimicrobial agent to the composition of Nagano et al. since it is notoriously well known to include antimicrobial agents in polypropylene based polymeric blends that are formed into containers or pallets as taught by Ueeda et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added an antimicrobial agent to the composition of Nagano et al. since it is notoriously well known to include antimicrobial agents in polypropylene based polymeric blends that are formed into containers or pallets as taught by Ueeda et al.

20. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Nakacho et al.

Nagano et al. teach the container as discussed above. Nagano et al. fail to explicitly teach that the flame retardant is selected from the group consisting of ammonium phosphates, compounds containing phosphorous-nitrogen bonds and cyclic phosphates. Nakacho et al., however, disclose a flame retardant resin composition comprising a thermoplastic resin such as polyethylene or polypropylene (i.e. a polyolefin), a thermosetting resin such as epoxy resin and a flame retardant such as one or both of antimony trioxide and ammonium phosphate (col. 11, lines 10-67 and col. 14, line 40-col. 15, line 8). Therefore, one of ordinary skill in the art would have recognized to have replaced the antimony trioxide of Nagano et al. with ammonium phosphate, or to have added ammonium phosphate to the composition of Nagano et al. that includes antimony trioxide, since antimony trioxide and ammonium phosphate are, individually

or in combination, suitable flame retardants for polyolefin/epoxy resin blends as taught by Nakacho et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the antimony trioxide of Nagano et al. with ammonium phosphate, or to have added ammonium phosphate to the composition of Nagano et al. that includes antimony trioxide, since antimony trioxide and ammonium phosphate are, individually or in combination, suitable flame retardants for polyolefin/epoxy resin blends as taught by Nakacho et al.

21. Claims 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Perez et al. and in further view of Angell, Jr.

Nagano et al. teach a plastic pallet comprising polyolefin resin, epoxy resin and a fire proofing agent (page 3, paragraph 0007 of Public Report of Disclosure of Patent). Epoxy resin is a thermosetting resin. A pallet is a container for shipping and storage. Nagano et al. teach that the pallet comprises antimony trioxide as a fire proofing agent (equivalently a flame retardant) (page 3, paragraphs 0007 and 0008 of Public Report of Disclosure of Patent). Antimony trioxide is non-halogenated, and is therefore a non-halogenated flame retardant. Nagano et al. fail to explicitly teach that the container comprises structural foam and that the structural foam comprises an integral skin and a cellular core. Perez et al., however, disclose a polymer network that is applied to a storage vessel (col. 3, lines 24-25) comprising a thermally cured epoxy resin and a fully prepolymerized hydrocarbon polyolefin (col. 3, lines 8-12). Perez et al. disclose that the composition is a foam (any foam can be considered to be "structural") (col. 23, lines 58-59). Furthermore, Angell, Jr. discloses a container formed of a foamable polymeric material having a wall having a dense surface zone (also referred to by Angell, Jr. as a shell) and a cellular interior

that has a greater flexural strength and stiffness than a wall of the same thickness that is uniformly solid (col. 2, lines 8-22 and 42-71). The shell disclosed by Angell, Jr. is structurally equivalent to the integral skin as claimed by Applicant. Therefore, one of ordinary skill in the art would have recognized to have used the polymeric foam composition of Perez et al. that comprises a thermally cured epoxy resin and a fully prepolymerized hydrocarbon polyolefin as a component of the pallet of Nagano et al. since the polymeric foam composition of Perez et al. is applied to a storage vessel as taught by Perez et al. and to have formed the container such that the foam comprises an integral skin and a cellular core in order to maximize the flexural strength and stiffness of the container as taught by Angell, Jr.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the polymeric foam composition of Perez et al. that comprises a thermally cured epoxy resin and a fully prepolymerized hydrocarbon polyolefin as a component of the pallet of Nagano et al. since the polymeric foam composition of Perez et al. is applied to a storage vessel as taught by Perez et al. and to have formed the container such that the foam comprises an integral skin and a cellular core in order to maximize the flexural strength and stiffness of the container as taught by Angell, Jr.

22. Claims 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano et al. in view of Ueda et al. and in further view of Dyckman et al.

In regard to claims 41 and 42, Nagano et al. teach the container (i.e. pallet) as discussed above. Nagano et al. fail to teach that the container comprises an antimicrobial additive that is integrally associated with the container and that is substantially insoluble in water. Ueda et al., however, disclose a propylene based polymer sheet that may be blended with another resin that is

formed into a container or a pallet that comprises an antimicrobial agent (col. 9, lines 23-43). Ueeda et al. disclose that the antimicrobial additive is integrally associated with the container since Ueeda et al. disclose that the antimicrobial agent is blended with the resin (col. 9, lines 23-43). Therefore, one of ordinary skill in the art would have recognized to have added an antimicrobial agent to the composition of Nagano et al. such that the antimicrobial additive is integrally associated with the container since it is notoriously well known to include antimicrobial agents that are integrally associated with the container in polypropylene based polymeric blends that are formed into containers or pallets as taught by Ueeda et al. Furthermore, Dyckman et al. disclose a biocidal polymer such as an epoxy resin that is chemically combined with a biocidal, antifouling organic tin moiety (col. 1, lines 6-13, col. 3, lines 47-68 and col. 5, lines 35-38). Dyckman et al. disclose that the leaching of organometallic antifouling salts (such as organotin salts), which introduces toxic metallic compounds to water environments, is reduced by using less water-soluble homologs of the organometallic antifouling salts (col. 2, lines 8-55). Therefore, one of ordinary skill in the art would have recognized to have used the organotin salts having relatively low water solubility of Dyckman et al. as the antimicrobial agent of Ueeda et al. in order to reduce the leaching rate of organometallic salts and to thus reduce the release of toxic metallic compounds as taught by Dyckman et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added an antimicrobial agent to the composition of Nagano et al. such that the antimicrobial additive is integrally associated with the container since it is notoriously well known to include antimicrobial agents that are integrally associated with the container in polypropylene based polymeric blends that are formed into containers or pallets as taught by

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Ueeda et al. and to have used the organotin salts having relatively low water solubility of Dyckman et al. as the antimicrobial agent of Ueeda et al. in order to reduce the leaching rate of organometallic salts and to thus reduce the release of toxic metallic compounds as taught by Dyckman et al.

In regard to claim 43, Dyckman et al. disclose that the organotin salt is incorporated in the polymeric composition (col. 5, lines 35-38).

In regard to claim 44, Dyckman et al. explicitly disclose that the organotin salt is an antifouling agent (col. 1, lines 6-13) and a slimicide (col. 3, 47-48).

In regard to claim 45, Dyckman et al. disclose that the organotin salt inhibits the growth of bacteria (col. 1, lines 14-24 and col. 3, lines 59-63), fungi (col. 3, lines 59-63) and parasites (tubeworms, col. 18, lines 40-45).

ANSWERS TO APPLICANT'S ARGUMENTS

23. Applicant's arguments on pages 11-13 of Paper 8 regarding the 35 U.S.C. 103(a) rejection of claims 1, 2 and 5-11 over Nagano et al. in view of Nishitani et al. are rendered moot due to the withdrawal of this rejection due to Applicant's amendments in Paper 8.

It is true that Nagano et al. discloses a pallet comprising a halogenated epoxy as Applicant's point out. However, Nagano et al. nonetheless teaches that the pallet comprises a non-halogenated flame retardant such as antimony trioxide. Provided the language of the instant claims that include a non-halogenated flame retardant, Applicant's plastic container can indeed contain a halogenated epoxy, contrary to Applicant's argument to the contrary on page 12 of Paper 8.

24. Applicant's arguments on page 13 of Paper 8 regarding the 35 U.S.C. 103(a) rejection of claim 3 over Nagano et al. in view of Nishitani et al. and in further view of Radican are rendered moot due to the withdrawal of this rejection due to Applicant's amendments in Paper 8.

Applicant's arguments rely entirely on the arguments presented in regard to the 35 U.S.C. 103(a) rejection of claims 1, 2 and 5-11 that are addressed above.

25. Applicant's arguments on pages 13-14 of Paper 8 regarding the 35 U.S.C. 103(a) rejection of claim 4 over Nagano et al. in view of Nishitani et al. and in further view of Adedeji et al. are rendered moot due to the withdrawal of this rejection due to Applicant's amendments in Paper 8. Applicant's arguments rely entirely on the arguments presented in regard to the 35 U.S.C. 103(a) rejection of claims 1, 2 and 5-11 that are addressed above.

26. Applicant's arguments on page 14 of Paper 8 regarding the 35 U.S.C. 103(a) rejection of claims 12-17 over Nagano et al. in view of Nishitani et al. and in further view of Perez et al. are rendered moot due to the withdrawal of this rejection due to Applicant's amendments in Paper 8.

The teaching that the composition taught by Perez et al. "is applied as a coating to the surface of a conventional storage vessel" in Applicant's words in no way precludes the "coating" in Applicant's words in from participating as a structural member of the storage vessel. Any material can be considered a structural member. In response to Applicant's argument that "there is no suggestion in Perez et al. that such polymeric foams can be used as the members of the vessels themselves", the mere fact that the polymeric foam "is applied as a coating to the surface of a conventional storage vessel" in Applicant's words requires that the foam is a member of the vessel. Applicant also argues that "there is no teaching or suggestion in any of the references that there can be incorporated in the composition of the container rubber-free friction additives";

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claim 1 does not require that there are “rubber-free friction additives” that are “incorporated in the composition of the container”.

In response to Applicant’s argument that the Examiner’s conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the invention was made, and does not include knowledge gleaned only from the applicant’s disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 703-305-4511. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

wba
08/13/03

WBA


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

8/18/03